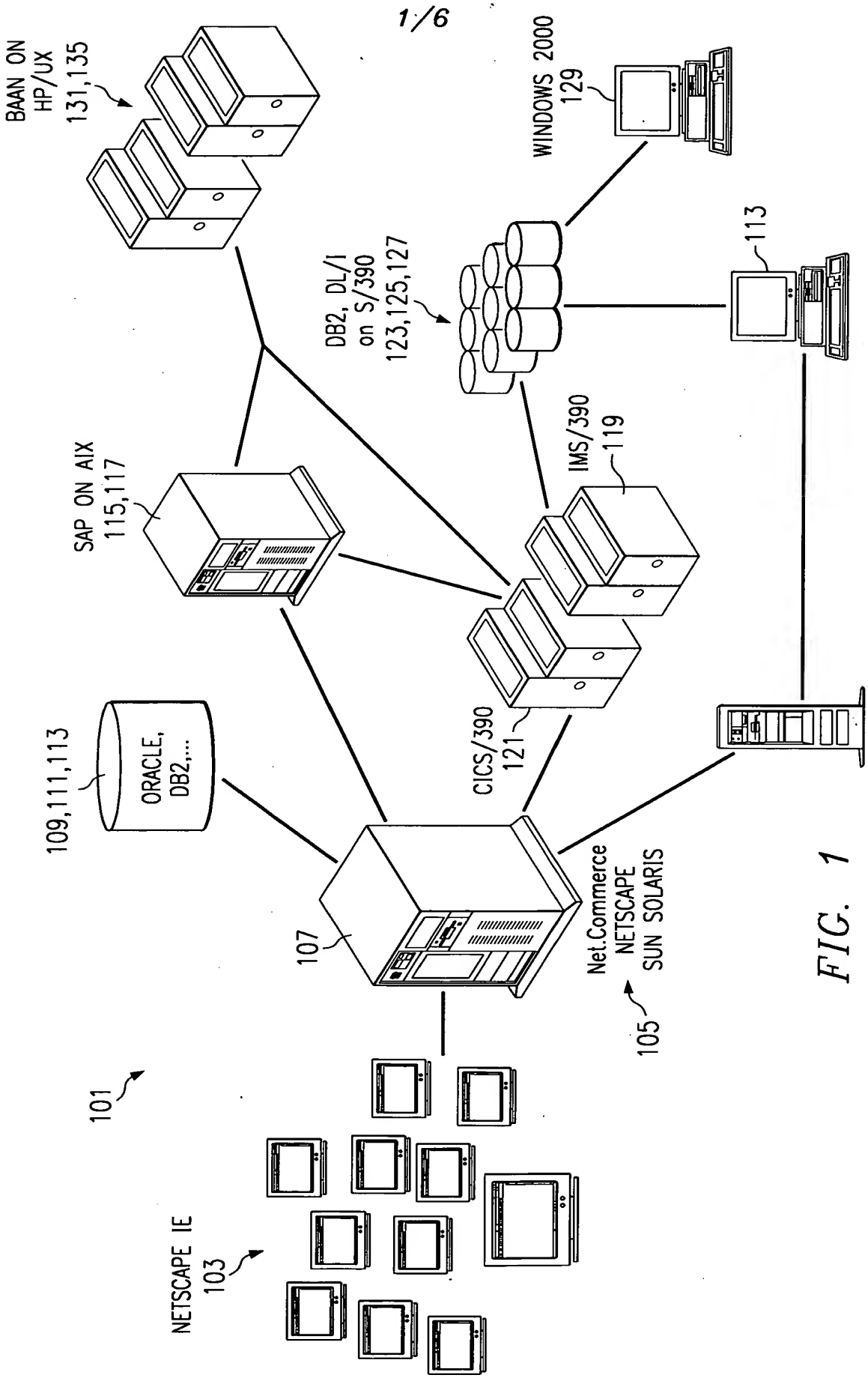
BAAN ON HP/UX 131,135
WINDOWS 2000 129
DB2, DL/I on S/390 123,125,127
113
SAP ON AIX 115,117
IMS/390 119
109,111,113
ORACLE, DB2,...
CICS/390 121
107
Net.Commerce NETSCAPE SUN SOLARIS
105
101
NETSCAPE IE 103

FIG. 1

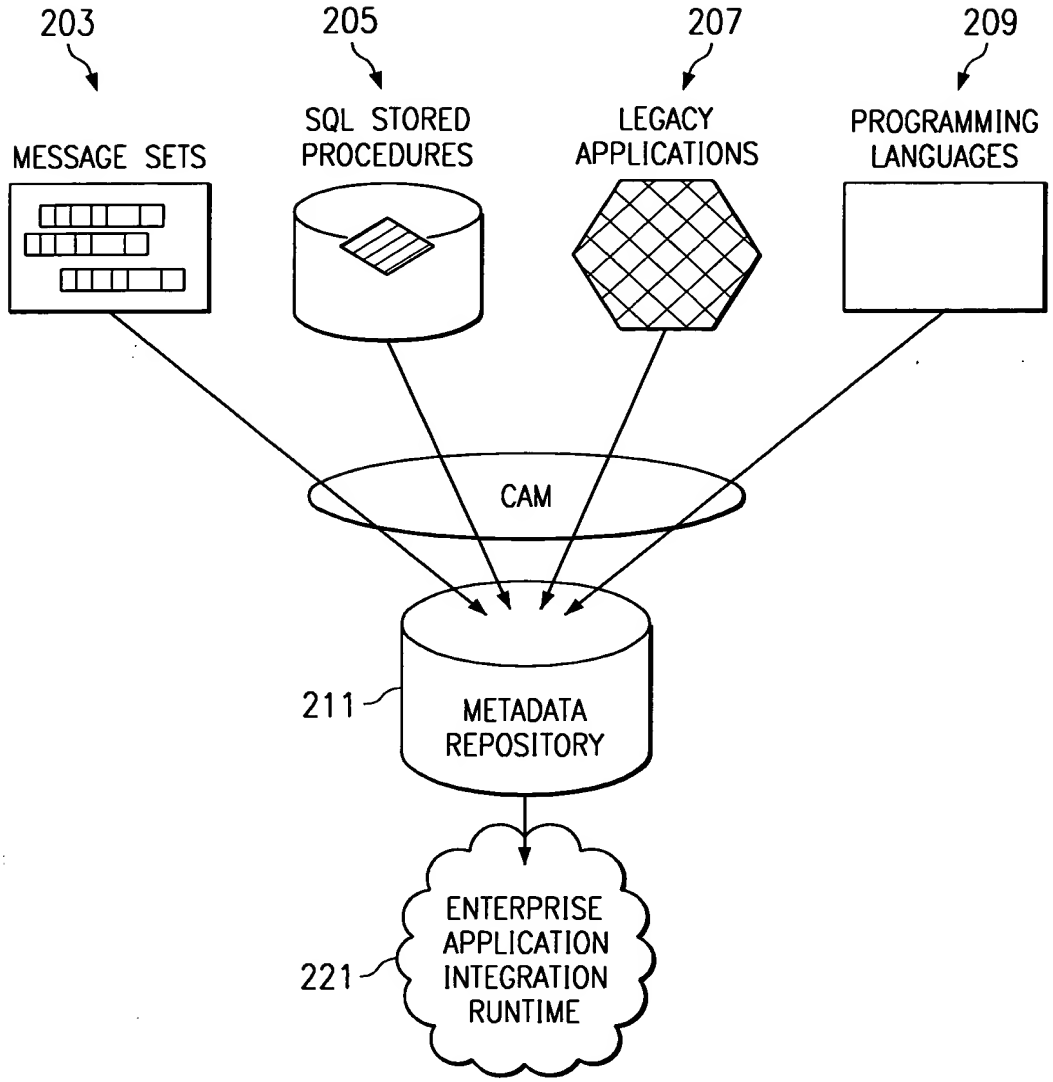
203
205
207
209
MESSAGE SETS
SQL STORED PROCEDURES
LEGACY APPLICATIONS
PROGRAMMING LANGUAGES
CAM
211
METADATA REPOSITORY
221
ENTERPRISE APPLICATION INTEGRATION RUNTIME

FIG. 2

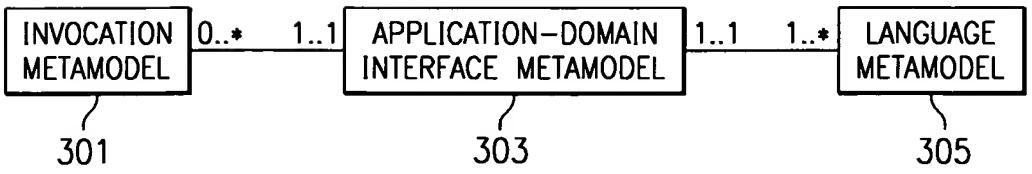
INVOCATION METAMODEL
0..*
1..1
APPLICATION-DOMAIN INTERFACE METAMODEL
1..1
1..*
LANGUAGE METAMODEL
301
303
305

FIG. 3

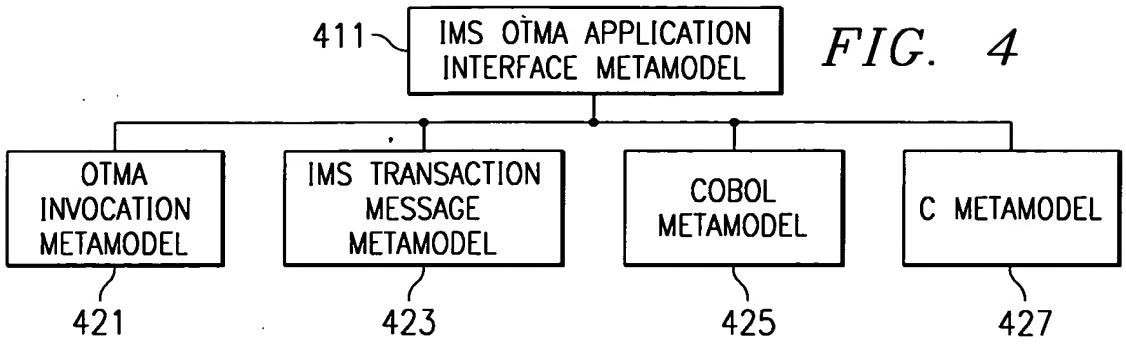

FIG. 4

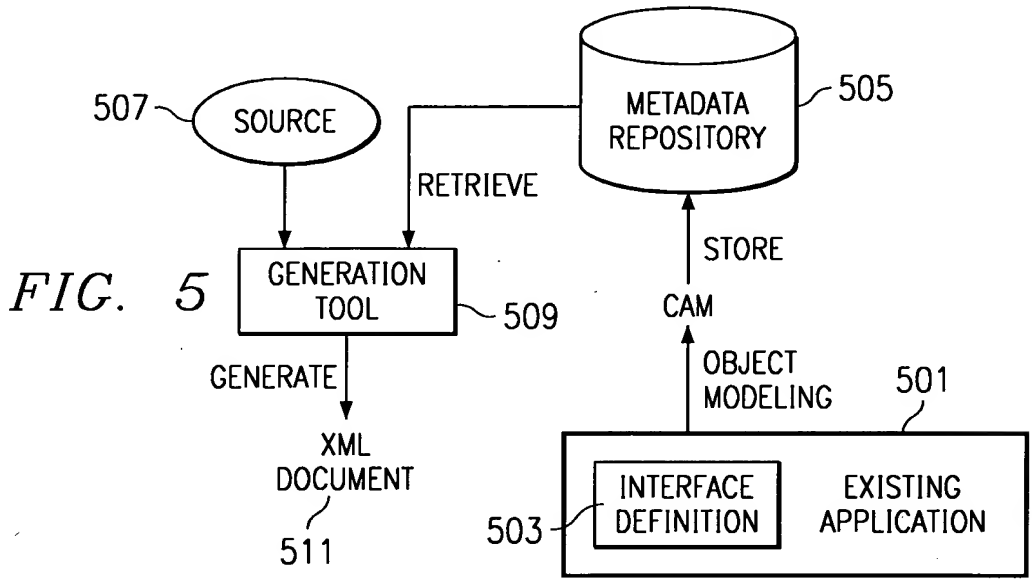

FIG. 5

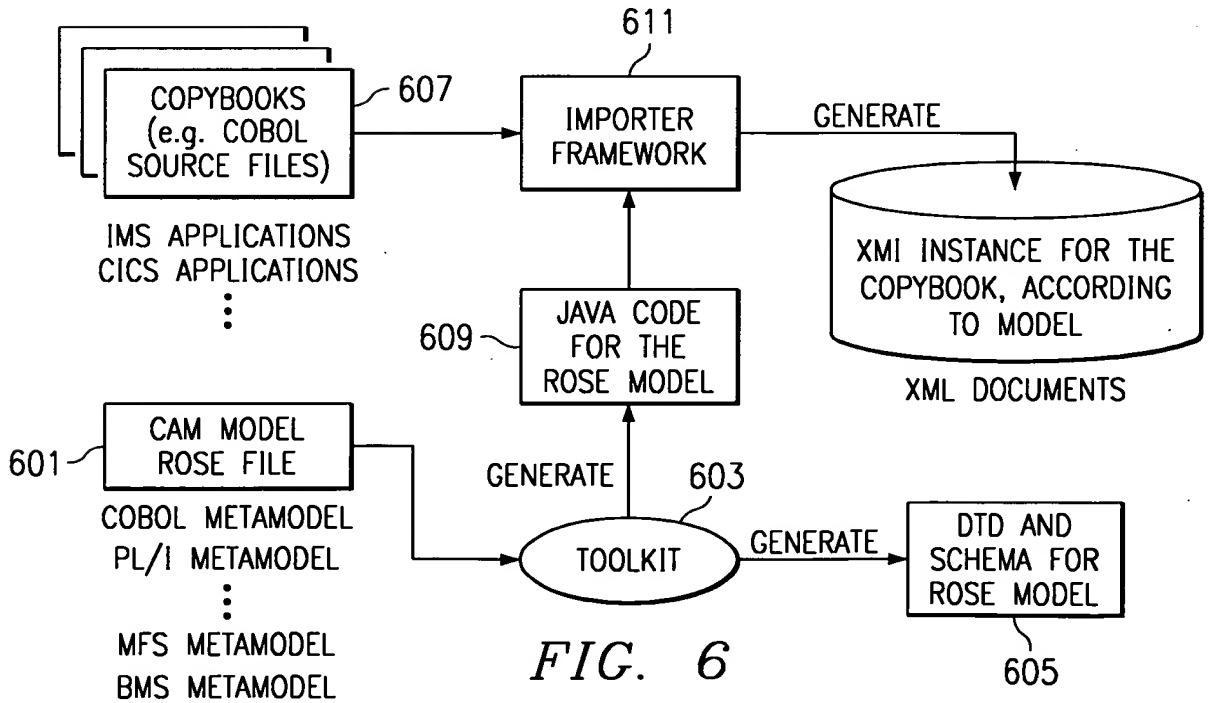

FIG. 6

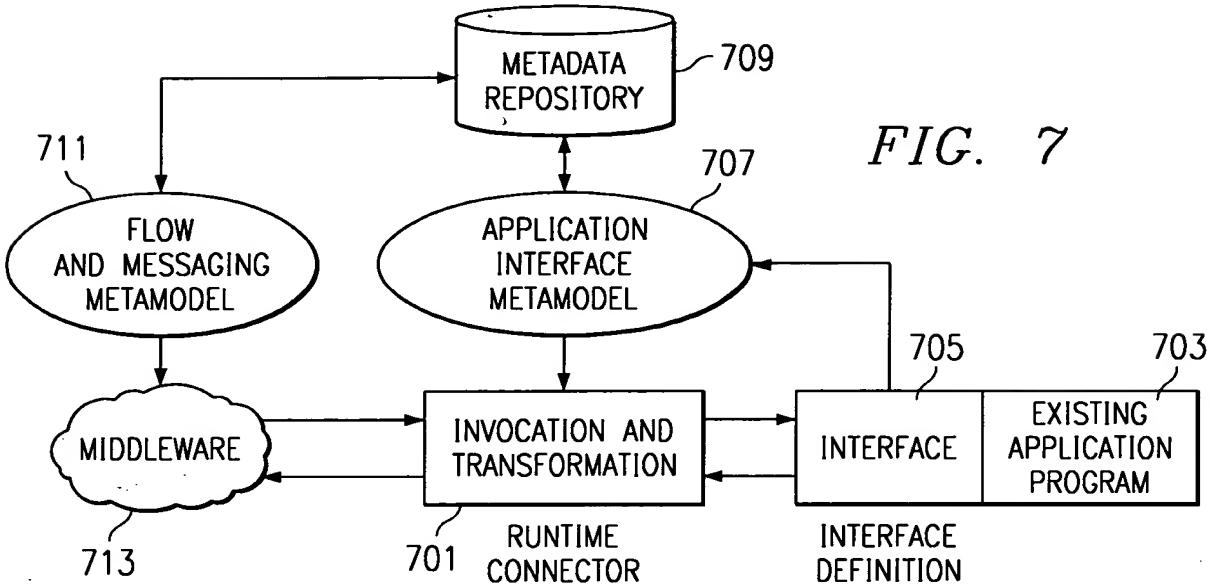

FIG. 7

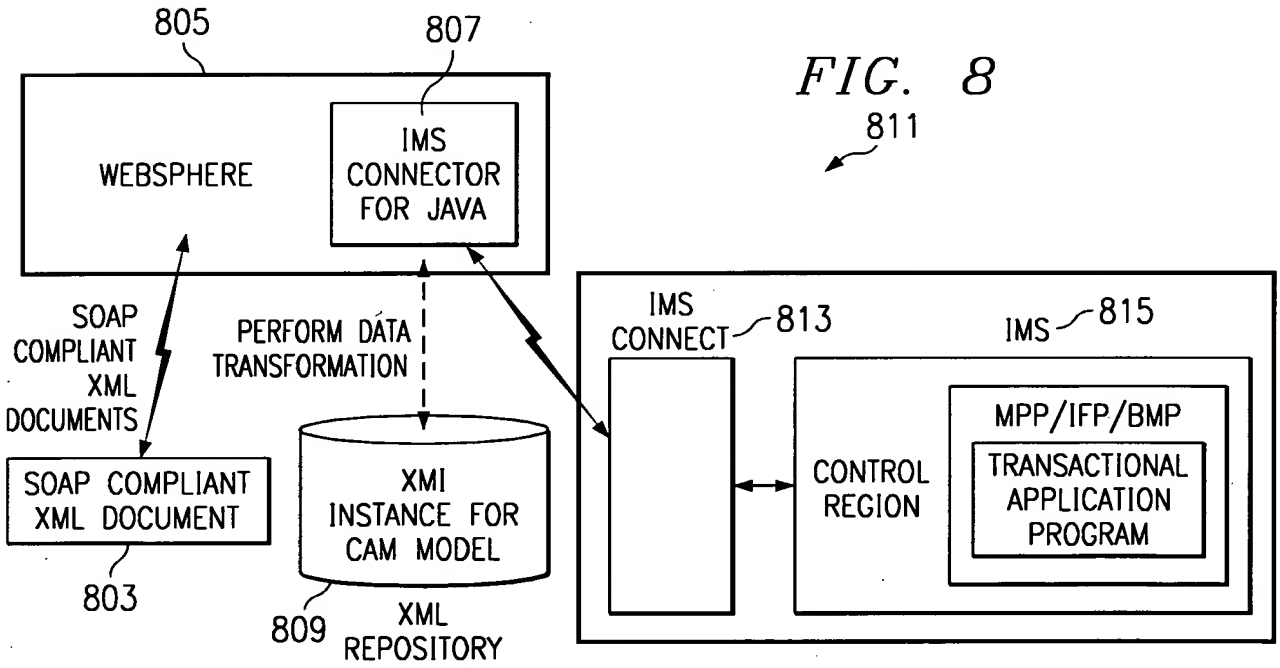

FIG. 8

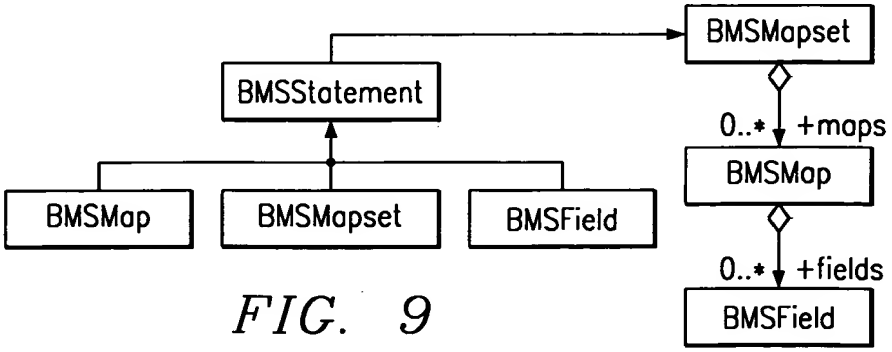

FIG. 9

BMSMapset
base : String color : BMSColorType control : BMSControlType cursorLocation : boolean data : BMSDataType descriptionAttributes : BMSMapAttributesType extendedAttributes : BMSExtendedAttributesType fieldSeparator : String fold : BMSFoldType highlighting : BMSHighlightingType horizontalTabs : int language : BMSLanguageType logicalDeviceCode : int mapAttributes : BMSMapAttributesType mode : BMSModeType outboardFormatting : boolean outlining : BMSOutliningType partition : String programmedSymbol : String shiftOutShiftIn : boolean storage : boolean suffix : String terminal : String tioaPrefix : boolean transparent : boolean trigraph : boolean type : BMSMapsetType validation : BMSValidationType vericalTabs : int

BMSMap
column : String color : BMSColorType control : BMSControlType cursorLocation : boolean data : BMSDataType descriptionAttributes : BMSMapAttributesType extendedAttributes : BMSExtendedAttributesType fields : boolean fieldSeparator : String header : boolean highlighting : BMSHighlightingType justify : BMSJustifyType line : String mapAttributes : BMSMapAttributesType outboardFormatting : boolean outlining : BMSOutliningType partition : String programmedSymbol : String shiftOutShiftIn : boolean size : BMSSizeType terminal : String tioaPrefix : boolean trailer : boolean transparent : boolean validation : BMSValidationType

BMSField
attributes : BMSAttributesType case : boolean color : BMSColorType group : String highlighting : BMSHighlightingType initialValue : String justify : BMSJustifyType length : int occurs : int outlining : BMSOutliningType pictureInput : String pictureOutput : String position : BMSPositionType programmedSymbol : String shiftOutShiftIn : String transparent : boolean validation : BMSValidationType

FIG. 10A

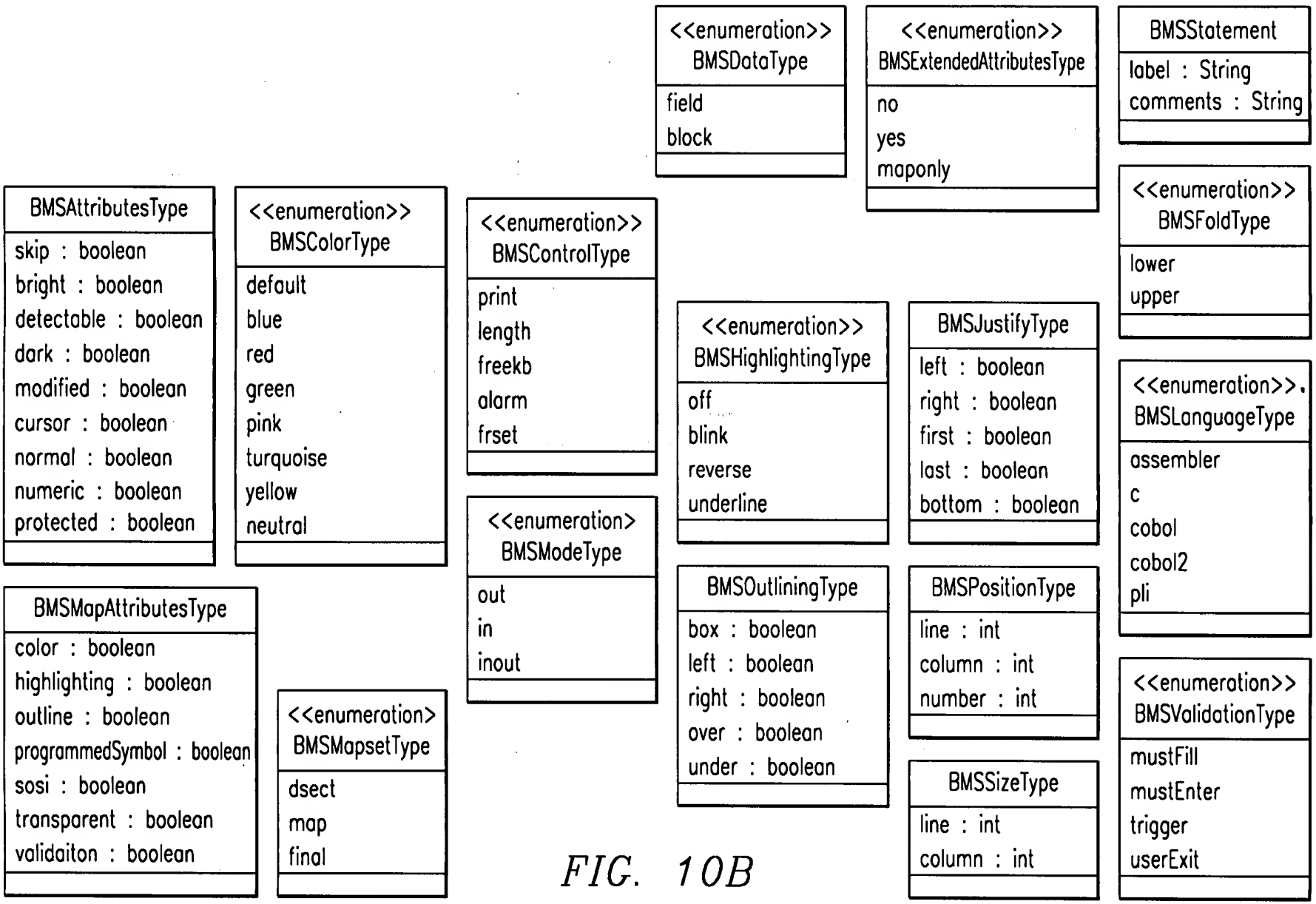
BMSAttributesType
skip : boolean
bright : boolean
detectable : boolean
dark : boolean
modified : boolean
cursor : boolean
normal : boolean
numeric : boolean
protected : boolean
<<enumeration>>
BMSColorType
default
blue
red
green
pink
turquoise
yellow
neutral
<<enumeration>>
BMSControlType
print
length
freekb
alarm
frset
<<enumeration>>
BMSDataType
field
block
<<enumeration>>
BMSExtendedAttributesType
no
yes
maponly
BMSStatement
label : String
comments : String
<<enumeration>>
BMSFoldType
lower
upper
<<enumeration>>
BMSHighlightingType
off
blink
reverse
underline
BMSJustifyType
left : boolean
right : boolean
first : boolean
last : boolean
bottom : boolean
<<enumeration>>
BMSLanguageType
assembler
c
cobol
cobol2
pli
BMSMapAttributesType
color : boolean
highlighting : boolean
outline : boolean
programmedSymbol : boolean
sosi : boolean
transparent : boolean
validaiton : boolean
<<enumeration>
BMSMapsetType
dsect
map
final
<<enumeration>
BMSModeType
out
in
inout
BMSOutliningType
box : boolean
left : boolean
right : boolean
over : boolean
under : boolean
BMSPositionType
line : int
column : int
number : int
BMSSizeType
line : int
column : int
<<enumeration>>
BMSValidationType
mustFill
mustEnter
trigger
userExit

FIG. 10B